

A model of pedagogical strategies for low income students in the Philippines

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This study aimed to develop a model for how teachers can better facilitate learning by economically disadvantaged or low income students. Grounded on the contextual, personal, and relational dimensions of the academic experience of financially-challenged teacher education students, this study designed and developed a model of pedagogical strategies that are better for meeting these students' needs. With the central question "How can we better facilitate the learning of students living in poverty?", a series of focus-group discussions was conducted with a select group of university faculty with experience in teaching low income college students. Findings from the content analysis identified six core pedagogical strategies. These findings shaped the design of the context-sensitive and responsive model of pedagogical strategies for low income students. Implications of the model for teachers, educators and governments are outlined.

Introduction

Poverty is defined as "the state of one who lacks usual or socially acceptable amount of money or material possessions" (Kanbur & Squire, 2002, p.3). The literature on poverty suggests that it has an effect on education. For example, it has been reported that poverty has a negative association with academic achievement due to the limited resources available to low income students (Lacour & Tissington, 2011). Likewise, it has been reported that children from poorer households are more likely to delay the start of their education and are also most likely to drop out before completing their education (United Nations, 2013). In view of the Philippine government's goal of alleviating poverty through education, this study aimed to develop a model of innovative pedagogical strategies in addressing the needs of learners living in poverty. The pedagogical model was grounded on the experiences and encounters of economically disadvantaged students as they pursue their education. When a pedagogical approach or strategy is grounded from the actual experiences of the students, it will address their actual needs.

Literature review

Studies on marginalised students have been conducted to support the development of pedagogy for low income students (Haberman, 1991); provide social innovations aimed at improving educational outcomes for poor children (Barbarin & Aikens, 2015); and call attention to the need to address the country's rapid population growth, since there is a strong link between economic performance, on the one hand, and economic growth and poverty reduction, on the other (Balisacan, 2006). In the Philippines, there has been a number of research and advocacy done in seeking for ways to address poverty issues (Balisacan & Pernia, 2002; Balisacan, 2006). Specifically, formulations for policy

improvement were provided to address how schools should address concerns in providing for the needs of low income students; minimising education inequality between students and regions in the Philippines (Mesa, 2007); and improving poor governance of officials (Hine, Montiel, Cooksey & Lewko, 2005). Moreover, investigations concerning the psychological experiences of people who see themselves as being poor (Tuason, 2011); and relationships between social dominance orientation and attitudes towards poor people (Bernardo, 2013) were undertaken to document how poverty is viewed from different lenses.

In higher education, Philippine universities currently have an enrolment of almost 3 million students (Commission on Higher Education, 2017b) in both state and private universities. A total of 1.3 million students are enrolled in government-funded universities (Commission on Higher Education, 2017a) who are enjoying free tuition because of the recently passed bill (Republic Act 10931) providing senior high school graduates the opportunity for free education (Republic of the Philippines, 2017). When enrolled, students are given the opportunity to apply for student financial assistance programs (e.g. full and partial scholarships for students in both private and government-funded universities). However, the scholarships are limited to a selected few, so not all qualified students are able to avail (Halili, 2014). This leads to difficulties during their higher education due to financial hardships, despite being provided with free tuition. College students who have difficulty making ends meet financially often work in part-time jobs inside and outside the university, and find these additional tasks to be sources of stress (Robotham & Julian, 2006).

Poverty is perceived to be resulting from personal and socio-cultural factors (Tuason, 2011) with personal factors attributed to lack of educational opportunities, as well as personality factors pertaining to lack of motivation, and socio-cultural factors emphasising government corruption and work availability. Philippine data show that the identified causes of poverty are the following: inequality, lack of quality education, lack of jobs, corruption, natural calamities and overpopulation (Uy & Pua, n.d.). Causes of being poor were perceived to be addressed by highlighting the importance of education, infrastructure, terms of trade, agrarian reform, governance, and certain geographic attributes (Balisacan & Pernia, 2002). Schooling, if accompanied by complementary public investments, raises the welfare of the poor, apart from its indirect effect through economic growth. It has also been reported that younger and college educated individuals are more likely to view their living conditions as transient compared to older and elementary educated individuals (Generalao, 2005).

Addressing the widespread poverty problem is the single most important policy challenge facing the Philippines (Balisacan, 2006). The poor performance of the Philippines in economic growth and poverty reduction has often been attributed in part to the relatively large variation in access to infrastructure and social services across regions and island groups. Personal experiences of poor people highlighted hopelessness in their plight and overcoming hardships are passed on to younger generations. Children suffer from this vicious cycle where they become handicapped by a mismatch between needs and

resources that should be given by the government and addressed by the school (Barbarin & Aikens, 2015).

From a social perspective, students from poor families may have clear aspirations on being able to overcome their situations. A number of studies (Tuason, 2011; Weiner, Osborne & Rudolph, 2011) suggest that individuals who were raised poor and stayed poor typically mentioned working hard to get their children an education or a job, hoping that their children would have better lives, and also that their children would help bring them out of poverty. Such aspirations for their children enhance notions of social mobility (Ellemers & Haslam, 2012) for the younger generations. This idea where children choose to study despite economic hardships may be seen as a way to escape from their plight by pursuing an education or career that allows them to be seen as a member of a high-status professional group (e.g., as a teacher) rather than as a member of a group with a low status in society. This is consistent with the research indicating that some Filipino adolescents view learning as critical to the improvement of one's social position or economic circumstances (Bernardo, Salanga & Aguas, 2008).

To cope with poverty (Tuason, 2011), economically disadvantaged people generally ask for help from other people, by borrowing money for children's schooling or asking for food, free health care and medications, or a place to stay. Where some remain impoverished, there are some who generally have persevered and relied on others' help and consideration. Studies about those who changed their fate generally expressed a realisation that the poor did not want to continue a life of poverty (Tuason, 2011). Instead, they persevered to make life different for themselves. Because they did not want to experience poverty anymore, nor did they want a life of poverty for their siblings, children, or parents, they worked hard. Grit, hope, and perseverance serve as the main drivers in creating the future they want for themselves and their families.

The previous discussion highlights issues pertaining to inequalities that effectively excluded people from education (Walsh, 2014). Specifically, inequalities in relation to financial capability and limited resources formed a significant part of the academic experience of students from poor families. It has been articulated that learners from diverse backgrounds bring their socio-economic characteristics with them to school (National Education Association, 2011). This means that the very context of poverty may have a profound influence on how such students learn and work in their classrooms.

In a phenomenological study (Reyes, Rungduin, David & Bayten, 2016) conducted with a select group of low income teacher education students in the Philippines, the central question "*What characterises the academic experience of low income teacher education students?*" was addressed. The findings yielded the *contextual, personal, and relational (CPR) dimensions* of the academic experience of students from poor families. The CPR sub-dimensions of *poverty as a challenge, education as an opportunity, motivational drives, motivational foci, coping strategies, learning strategies, social support, and spiritual connectedness* also emerged from the study. These dimensions, sub-dimensions, and their corresponding core experiences reflect the specific contexts, motivations, adaptive strategies, and external supports teacher education students experience while dealing with poverty. Therefore, pedagogical strategies that

address the needs and contexts of low income students will ensure that this group of students will have expanded opportunities to be successful in their learning.

In his paper on Bernstein's sociology of pedagogy, Pausigere (2016) argued that innovative strategies like responsive pacing, sequencing, and mixed pedagogies can ensure learning by students from different economic classes. Hence, a pedagogical model that can promote learning in spite of the condition of poverty is necessary. Fundamental to such a pedagogical model is the development of educational virtues and liberation in terms of social mobility (Roberts, 2007).

Purpose of the study

The present study is part of a broader research project on the design and evaluation of innovative pedagogy for economically disadvantaged students. The findings in the study of Reyes et al. (2016) were used as a grounding framework for the development of a model of pedagogical strategies for students whose economic circumstances create a unique challenge in their academic life. The present study aims to address the central question: *How can we better facilitate learning for students living in poverty?* In this study, "facilitate" refers to the pedagogical strategies that faculty members in teacher education institutions could use in teaching economically disadvantaged students, which in effect could be applied in the future to their classes when they become practising teachers. The researchers attempted to address the central question with the hope of designing a conceptual model that has practical application and theoretical implication on facilitating learning by students who may have specific needs because of poverty. For this study, a pedagogical model was envisioned that would allow college students who may be financially poor to maximise their resources with the support of their teachers and the institution. Teaching has been perceived as a way to reconnect (Thompson & Kleine, 2015), to keep the relationship between teacher and student alive, and to promote deep learning.

Thus, the present study aims to develop a pedagogical model for tertiary education students based on the CPR (contextual, personal, and relational) dimensions of the academic experience of financially-challenged students (Reyes et al., 2016). To address this main aim, the study purported to address the following objectives: (1) identifying actual and ideal pedagogical strategies for economically disadvantaged students, and (2) developing a model of pedagogical strategies for economically disadvantaged students.

Method

Research design, study site and selection of participants

A qualitative-developmental research design was adopted in this study. It is qualitative because it explored the experiences, ideas, and insights of a select group of university faculty in their teaching for economically disadvantaged college students. The study is developmental because it aimed to develop a pedagogical model for low income students as an output.

The site of the study was the Philippine Normal University, a teacher training institution in the Philippines with five campuses representing South Luzon, North Luzon, Visayas, Mindanao and the National Capital Region in the Philippines. The model development part of the study involved ten university faculty members who served as participants. All of the participants have current or prior experiences in teaching economically disadvantaged college students. While not all students of Philippine Normal University are considered as economically-disadvantaged, many of these students are from families whose income is below the poverty threshold set in their respective regions.

In the validation phase of the study, eleven participants (two faculty, five teacher education students, and four researchers) were involved. Both the faculty and student participants were from the Visayas campus. The student participants were enrolled in their practicum course during the time of the data gathering and were selected based on their participation as financially challenged students in the study by Reyes et al. (2016). None of the students had scholarships but they were all enrolled in a state university with the lowest school fees in the region. Some of the participants reported that they did part-time jobs to earn money for paying school-related expenses. All students were recommended by their teachers as having good academic standing.

Instrumentation, data collection, and data analysis

An open-ended questionnaire and a focus-group discussion (FGD) guide was developed by the researchers and validated by a select group of experts in education. The questionnaire aimed to assess the participants' current strategies in teaching low income students. A single question, *"What teaching strategies do you use to ensure that economically challenged students learn in your classroom?"* was asked and participants wrote their responses in the space provided in the questionnaire. The FGD guide aimed to assess the participants' ideas and insights on what pedagogical strategies could be developed based on the CPR dimensions of low income students' academic experiences. The key question asked was *"Given the core experiences of economically disadvantaged students reflected in the CPR dimensions and sub-dimensions of their academic experience, what teaching strategies can be developed to facilitate the learning of economically disadvantaged students?"* The questions in the questionnaire and FGD guide were designed to identify actual and ideal pedagogical strategies for low income students based on the faculty participants' actual teaching experiences and their ideas and insights on the CPR dimensions.

The faculty participants answered the questionnaire and joined the three-day FGD (25-27 November 2017) which aimed to discuss the CPR dimensions that emerged from the study by Reyes and colleagues (2016) and to explore pedagogical strategies that could address the identified needs of the learners. The data collection process started with an orientation of the participants on the objectives of the study. The participants were then asked to answer the open-ended questionnaire which was given to them through electronic mail. Prior to the FGD, the participants answered the questionnaire in their own time and were asked to return it through email. During the FGD, one of the researchers served as observer and documented the FGD proceedings, while the other researchers served as facilitators. The CPR dimensions, sub-dimensions, and core

experiences were presented and explained to the participants. They were then asked to conceptualise pedagogical strategies that they can use in addressing the needs of economically disadvantaged tertiary education students, based on the CPR dimensions.

A series of discussions, arguments, and sharings of personal experiences followed each pedagogical strategy that was cited. Common and related strategies were then analysed to identify core strategies. The researchers applied a consensual approach in determining and deciding on the core pedagogical strategies. This process led to the identification of core pedagogical strategies for economically disadvantaged students. After the core and specific strategies were identified, the researchers discussed and made a consensus on the definitions of the identified core strategies. The core strategies were then analysed vis-à-vis the CPR dimensions in order to formulate the components of a pedagogical model for economically disadvantaged students. Each FGD session in a day lasted for three to four hours. All FGDs were audio-recorded with the consent of the participants.

After the FGD, the researchers met for three sessions from January to March to design the pedagogical model based on the findings from the FGD. The validation phase (15-17 March 2017) followed. The model validation consisted of inviting two faculty members from the Visayas campus to validate the developed model in relation to its applicability in the classroom. Through FGD, the strategies were examined and processes elaborated to give the approaches meaning and provide specific activities. The question asked in the validation was *“How would the strategies identified inform the general lesson structure?”* and *“In what ways would the framework be applicable in teaching courses in the tertiary level?”* Comments and recommendations from the FGD were used to refine the model. During the FGD, the researchers and the faculty participants agreed that the pedagogical strategies exposed by the developed model may also be applicable in teaching basic education students.

A second level of validation was done with the five student participants. While the pedagogical model was designed primarily for teaching tertiary students, the validation phase involving student participants allowed an examination of the applicability of the pedagogical model for basic education students. The students were asked to develop their own lesson plans using the model as a guide in designing their lessons for prospective students in the basic education level, as they will be teaching primary and secondary students in their future careers.

Findings and discussion

Identifying pedagogical strategies for low income students

Table 1 presents the core and specific pedagogical strategies that emerged from the identification of the actual (current strategies used by the participants) and ideal (proposed strategies conceptualised by the participants) teaching strategies that were deemed helpful in facilitating the learning of low income college students.

Table 1: Pedagogical strategies identified for low income students

Core strategy	Sample activities or actions
1. Flexible strategies	Class/Student consultation on course requirements. Requirements with accessible technological resources. Alternative format or form of course requirements.
2. Integrative strategies	Use of common requirements for several courses. Formative assessment tasks that are integrative.
3. Collaboration strategies	Peer mentoring/Peer assisted learning activities. Group learning activities. Brainstorming.
4. Modelling strategies	Vignette analysis. Profiling of success stories. Reflective learning activities.
5. Future-oriented strategies	Use of mnemonic devices in goal-setting. Use of career planning tasks and games.
6. Positive mindset strategies	Gratitude-related tasks. Self-concept oriented activities. Mindfulness activities.

The first core strategy identified is *flexible strategies* which pertains to a teacher adopting strategies which allow students a significant degree of flexibility in their learning and assessment tasks. The use of flexible teaching strategies and learning tasks where the costs or expenses of learning are lessened, if not totally removed, appears to be a very important factor in teaching low income students. An example provided by one teacher related to flexibility in specifying class requirements, in a case of allowing a student to submit handwritten homework instead of a computer file, thereby avoiding a cost requirement that did not necessarily alter the performance standards expected from the student:

I asked why the student turned in a handwritten assignment, he answered that he has no money for computer rental and he has no means to access a computer. I accepted his paper because I saw that despite his hardships, positive experiences fuel his motivation to study. I did not know that he is experiencing difficulties, because of his positive disposition. I confirmed this during the home visitation that the student is poor, but the student remained steadfast and determined to finish his studies. I cannot believe that this is his day-to-day experience seeing him in school, but when I talked to him and he shared how difficult it was for him to survive, it made me see how he framed his purpose to oversee all these difficulties. (Faculty member, F, North Luzon)

The second core strategy is *integrative strategies*. Integrative learning or assessment tasks refers to tasks that target multiple or inter-related learning outcomes. Thus, integrative strategies refer to a teacher's use of learning and assessment tasks that entail less workload and cost to students. A common example provided by the participants is designing course requirements to be common and integrative in two or more courses/subjects that would be more cost-efficient to low income students, without sacrificing performance standards. In general, flexible and integrative strategies address the CPR core experiences of burdens from the cost of daily living and limited resources for learning among low income students. As one faculty participant shared:

I only give one major requirement for the whole term. I believe students should not be burdened with too many requirements, especially those who struggle to find money to support their requirements (Faculty member, F, Manila)

The third core strategy refers to *collaboration strategies* or the teachers' use of collaborative learning experiences. The use of collaborative strategies involves giving students opportunities to work with and learn from a peer or a group. Sample strategies provided by the participants that fall into this core strategy include peer mentoring and group learning/ group performance activities. Allowing students to learn and perform learning tasks in collaboration with a peer or a group will benefit a student in terms of cutting cost, and will also allow collaborative learning that may strengthen the relational competence of economically disadvantaged students. Hence, this core strategy addresses the students' context of poverty as a challenge, and also contributes in shaping the relational dimension of their academic experience, especially in terms of peer support. As narrated by another faculty participant:

Problem solving is done in groups, scaffolding is done. I usually do, 5E's – engage, explore, explain, elaborate, and evaluate in teaching Science, despite the lack of resources, the students are able to do their tasks efficiently in groups. I guess collaborative learning works best when there students who do not have the resources like the other students. I see them strive in solving a problem, I assume to compensate for the submissions that they may have difficulty completing, not because they cannot do it, but because they do not have the resources like money to complete it. (Faculty member, F, Visayas)

The fourth core strategy pertains to *modelling strategies*. This refers to strategies that purposely provide opportunities for students to learn through observation and interaction with significant models in their immediate (i.e. home, school) and extended environments (i.e. community). Modelling strategies allow students to have direct interaction with their immediate (e.g. class, family) and extended learning environments (e.g. role model, resource person). Providing low income students with activities or learning experiences where they can effectively interact and model adaptive behaviour from positive role models addresses the need to facilitate the personal dimension (i.e. motivational drives, motivational foci) of students' academic experience. Sample strategies provided by the participants are conducting vignette analysis and profiling of success stories.

The fifth core strategy refers to *future-oriented strategies* or the use of future-oriented learning tasks that allow low income students to think and reflect on their future. Future-oriented strategies allow students to think about their future goals and aspirations and acquire insights that could help them become more optimistic and action-oriented in the present. This core strategy taps into students' motivations while also providing stimuli for them to reflect on their role in and for their family, and vice-versa. One sample strategy includes the use of career planning tasks and games. As shared by one faculty participant:

I use games and simulations. In values education, we do a lot of role playing, discovery learning. Storytelling, experience-sharing, moral dilemma, case study, for clarification the students found the values that are important for them as economically disadvantaged students. We go outside the classroom to experience the real life - we clarify their

response, structured rational discussion, coming from their life experiences. We do action projects. I think this helps the students focus on their goals and a lot of sharing provided information as to why they wanted to help their parents out of poverty. (Faculty member, F, Manila)

The sixth core strategy refers to *positive mindset strategies*. This core strategy pertains to learning activities which allow students to develop and practice optimism or positive thinking. This is important as the CPR dimensions highlight both motivation and coping strategies in their experiences. Sample strategies provided by the participants are learning activities that enhance self-concept and mindfulness. These learning experiences can give students opportunities to acquire personal insights and reflections on various aspects of their lives, especially into becoming and being positive thinkers about their personal goals and intentions. As shared by another faculty participant:

Being poor for some of them is seen as a privilege because they think it pushes them to strive better. Most of our economically disadvantaged students are included in the Dean's list. They are working students or work as student assistants, most of them excel in their classes. (Faculty member, F, Mindanao)

In general, the findings on the identified pedagogical strategies used by the participants in the study for teaching economically disadvantaged students are consistent with the arguments of Pausigere (2016) on the need to have pedagogical strategies that are flexible and adaptive to the needs of learners from a low socio-economic status. Interestingly, one can infer from the findings that the participants in this study have adequate understanding of the needs of their low income students. This understanding is then translated into adoption of certain strategies which they believe can address the needs of their economically-challenged students.

The researchers posit that each of the six core pedagogical strategies is an essential element of any instructional or pedagogical model for students challenged by their conditions of poverty. For learning to be more successful among low income students, teachers should design and use specific pedagogical strategies that are grounded from one or more of the six core strategies. This is important given the information from studies examining poverty from a cultural lens that poor individuals typically experience negative feelings such as self-pity and hopelessness (Tuason, 2011). Pedagogical strategies that are not innovative (e.g. not flexible) could further increase the experience of inequality that students experience and stimulate negative feelings that may affect their learning and performance in their classes. While having equal access to education enables social and economic mobility of the poor (Mesa, 2007), a more diversified and innovative approach in facilitating the learning of low income students is imperative, given their different socio-economic circumstances.

The CSR model of pedagogical strategies for low income students

The resulting pedagogical model was referred to as the context-sensitive and responsive (CSR) model of pedagogical strategies for low income students (see Figure 1). As a pedagogical model, it highlights the importance of education in addressing the cause and

effects of poverty (Balisacan & Pernia, 2002). The central premise of the model is the argument that pedagogical strategies should be sensitive and responsive to the context of low income students. While the model was initially designed for tertiary education students, the propositions and strategies that the model espouses can be adopted for teaching basic education students.

The developed model has five major propositions: (1) pedagogical strategies that are not sensitive and responsive to the experiences of low income students would not be effective in facilitating learning because teachers lack an understanding of how to respond to the learner's poverty condition which influences their learning experiences; (2) the teacher's knowledge and understanding of students' contexts, motivations, adaptive strategies, and personal relations serve as basic elements that teachers must consider for guiding their choices of pedagogical strategies; (3) specific strategies derived from the six core pedagogical strategies (flexible, integrative, collaboration, modelling, future-oriented, and positive mindset strategies) can facilitate the learning of low income students as they specifically address the essence of the academic experience of students living in poverty; (4) teachers may adopt their own pedagogical philosophies and approaches in teaching economically disadvantaged students, but the specific strategies should be characterised by flexibility and grounding in one of the six core pedagogical strategies; and (5) the use of core and specific strategies may be featured in any of the following pedagogical phases: activation, motivation, instruction, and evaluation.

The CSR model depicted in Figure 1 is shaped in a circle to emphasise the holistic nature of pedagogy, where the central idea of core pedagogical strategies serves as the inner core, and the six pedagogical strategies that surround the inner core serve as the elements of the inner core. The arrows outside of the sphere that point to it depict the basic elements in the academic life of low income students that must be considered in the choice of a core or more specific strategy, i.e. the students' contexts, motivations, adaptive strategies, and social relations. Lastly, surrounding the spheres are the four pedagogical phases of activation, motivation, instruction, and application where the context-sensitive and responsive pedagogical strategies may be applied.

The model and its components emphasise the need for a learning environment where extended or expanded opportunities are provided to low income students so they can learn better, in spite of poverty. Hence, the developed model is in consonance with the need to provide social innovations aimed at improving educational outcomes for poor children (Barbarin & Aikens, 2015). As a pedagogical model, the CSR model may be adopted by higher education and basic education teachers in their various contexts and settings. The model can be used if one intends to assist low income students in the classroom by providing expanded opportunities for them to be more successful. Specific strategies can be developed or reconfigured to ascertain that the major propositions of the model are adhered to and that a specific learning task or instructional activity uses at least one of the six pedagogical strategies described by the model. Instructional plans or lesson plans can be designed incorporating teaching strategies in any phase (from activation to evaluation) that are consistent with the major propositions of the model. The model's

proposed core strategies may also be adopted and specific strategies can be formulated from these core strategies.

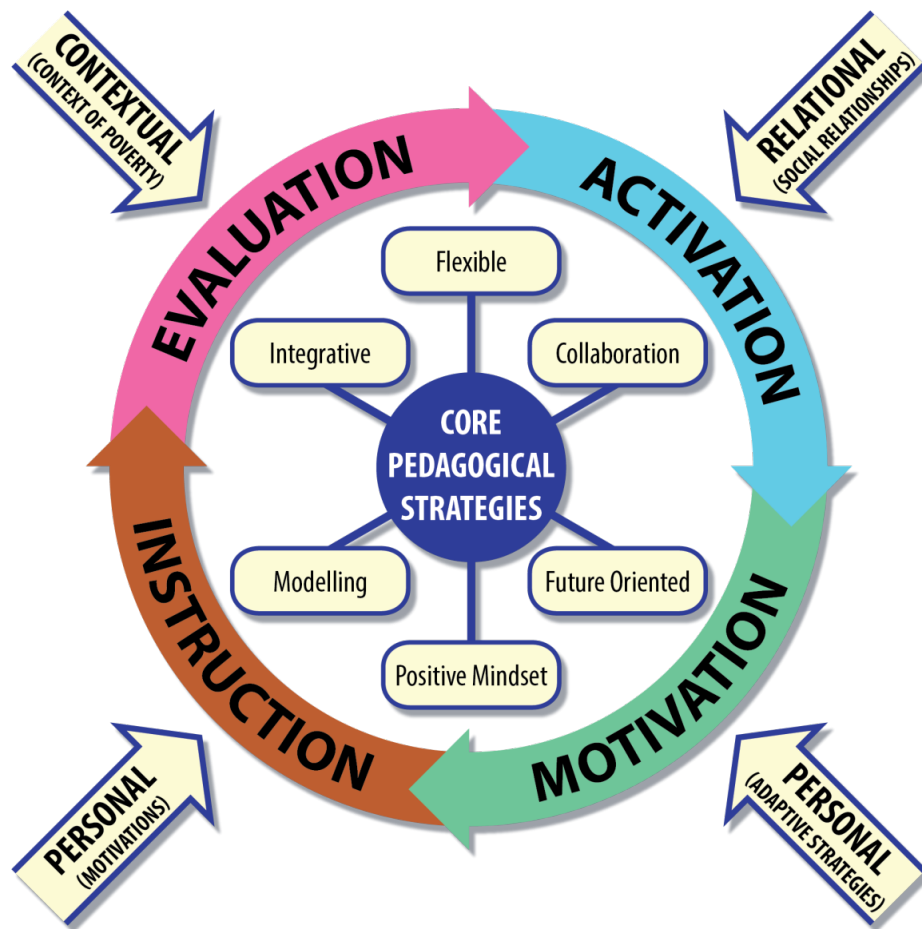


Figure 1: Context-sensitive and responsive (CSR) pedagogical model

Lesson plans from the CSR model

In the validation phase of the model with teacher education students, the researchers provided orientation to the students on how a lesson plan integrating the CSR model can be developed. The model was discussed with the students and their insights as to how the strategies have been implemented during their practice teaching were explored. A lesson plan format was provided, core strategies under the CSR model were identified, and procedures for the teaching episodes were explained in order to achieve the specific target or objectives of the lesson. The applicability of the general lesson structure was discussed in relation to their subject areas and activities pertaining to the approaches described by the CSR model were also specified. After examining the areas and the appropriateness of

the strategies to be integrated, students proceeded to develop their lesson plans. The developed lesson plans served as the exemplars of the pedagogical model. The teacher education students and their respective teachers provided positive feedback on the use of the CSR model in developing lesson plans.

Conclusion and recommendations

Teachers and educators have a large role to play to ensure that those who are economically disadvantaged will have access to expanded opportunities to address their needs brought about their conditions of poverty. At the heart of the teachers' role is the pedagogical approaches they use in the classroom to facilitate learning. Regardless of the teachers' pedagogical philosophies and approaches, the use of pedagogical strategies that are sensitive and responsive to the needs of low income students must be considered. The present study identified six core pedagogical strategies that a select group of university faculty have used to facilitate learning by low income teacher education students. From these six core strategies emerged five essential characteristics of pedagogical strategies for economically disadvantaged learners. Integrating these findings with the CPR dimensions (Reyes et al., 2016) yielded the *Context-Sensitive and Responsive* (CSR) model of pedagogical strategies for low income students.

The CSR model has five propositions capturing the need to provide extended opportunities for low income students, highlighting the need for pedagogical strategies to consider students' contexts, motivations, adaptive strategies, and social relations. Moreover, the model provides a framework where teachers can purposively design their learning and assessment tasks, from activation to motivation to instruction to evaluation, to be more sensitive and responsive to the needs of these students. Nevertheless, adopting the propositions and strategies posited by the model for students who are not economically disadvantaged does no harm. While there are higher proportions of low income students in public schools and state universities in the Philippines, these classrooms are typically a mixture of socio-economic status. The model emphasises the need for teachers to adapt for low income students, without forgetting or sacrificing the learning needs of students who are not economically disadvantaged.

Given these findings, schools and teachers should look into how they can provide more comprehensive assistance to the socio-economic circumstances of students living in poverty. As one way to start more purposive interventions for low income students, the researchers recommend that higher education faculty and basic education teachers adopt the CSR pedagogical model as a framework for facilitating learning by this special group. Needless to say, the model needs to be validated through applying it in actual practice. Further research on the applicability of the model in classroom instruction and in facilitating student learning should be conducted. Researchers and practitioners could develop instructional plans or exemplars with pedagogical strategies grounded from the model, implement them in instruction, and examine their effects and effectiveness using case study or quasi-experimental research designs.

In summary, the design and delivery of more effective pedagogy for low income students is an important issue requiring attention from teachers and administrators. Specifically for the government, policies should be in place that prescribe in-service training opportunities for teachers to become more sensitive and responsive to the special needs of lower socio-economic students. This requires specific training and updating of teachers on pedagogical strategies that are responsive to the needs of these students. The same should be articulated in pre-service education and training of teacher education students. The researchers hope that the findings of this research in general, and the developed pedagogical model in particular, will contribute in addressing learning and performance gaps to support and assist the achievement of academic success by low income students.

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