
TOWARD A PEDAGOGY GROUNDED IN CHRISTIAN SPIRITUALITY

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Church documents, theology, leadership theory, and sociology come together in this article to present a pedagogy for Catholic schools that is deeply rooted in a personal faith and a contemporary understanding of the person. Practical insights into developing a spirituality for teaching are offered.

INTRODUCTION

Catholic educators are called to foster the spirituality of their students. This statement is validated by Catholic Church documents on education (Congregation for Catholic Education [CCE], 1977, 1982, 1988), along with myriad authors who have written on vocational spirituality (Carotta & Carotta, 2005; Durka, 2002; Groome, 1998; Jacobs, 1996, 2005; Palmer, 1983, 1998, 2000, 2004; Shimabukuro, 1998, 2007). Although the term, spirituality, pervades the literature, it remains an abstract concept, described by compelling phrases, such as promoting the “integral formation” of students (CCE, 1982, §28), instilling in students “the spirit of Christ” (CCE, 1977, §90), fostering the “growth of the whole person” (CCE, 1977, §29), and assisting in students’ “interior formation” (CCE, 1988, §95). These concepts are at the heart of teaching and learning in the Catholic school and, when concretized into progressive teaching and learning methodologies, suggest a pedagogy that is grounded in Christian spirituality that will meet the needs of today’s “millennial generation students” (Nicoletti & Merriman, 2007).

OVERVIEW

In order to construct a conceptual model of a pedagogy grounded in Christian spirituality, the meaning of the term “pedagogy” will be explored, along with the evolution of three pedagogical models as they relate to the millennial generation. The term “spirituality” will be investigated, particularly as it relates to teaching and learning in a Catholic context, incorporating the work of Jacobs (2005) who suggested five spiritual components that equip the teacher to implement a spiritually-based pedagogy. Finally, a New

Science model for teaching and learning, along with best practice methodologies that support the spiritual development of students, will be introduced as a pedagogical foundation for Catholic schools.

PEDAGOGY: THE ART OF TEACHING THE YOUNG

Derived from the Greek word, *paideutike*, the term “pedagogy” means “the art of teaching the young” (Senge et al., 2000, p. 207). In today’s educational world, the narrow definition of the term equates with teaching techniques. However, from the perspective of lifelong learning, Senge and colleagues suggested that pedagogy be defined “to include all of the practices and processes that shape what people know and how they come to know it” (p. 207). In a 21st century school context, the term “pedagogy” would embrace every action inside the classroom, as well as throughout the school, that affects the learner, as well as its effects on the development of the learner. In a Catholic educational context, pedagogy would include the nurturance of the spirit of Christ in students in conjunction with their interior and integral formation.

THREE PEDAGOGICAL MODELS

Cambron-McCabe and Dutton (2000) identified the evolution of three approaches to teaching and learning. The first, referred to as a “transmission approach” places the learner in “a passive role of having something ‘done to you’...where experts [teachers] ‘tell’ participants [students] what they need to know” (p. 206). They portrayed this pedagogical model through the following classroom parody from the movie *Ferris Bueller’s Day Off*:

A high school economics teacher stands in front of a chalkboard. In a monotone, deadpan delivery, devoid of a shred of enthusiasm, he addresses the students with a fill-in-the-blank lecture. “In the 1930s,” he intones, “the Republican-controlled House of Representatives, in an effort to alleviate the effects of the—” He pauses for a second. “Anyone? Anyone?” Having received no answer, he fills in the blank “—Great Depression—” and continues with the sentence: “passed the—Anyone? Anyone? The Tariff Bill.” Students sitting at their desks, eyes glazed over, bored, disinterested, comatose, or asleep. This classroom parody...though cartoonlike in its exaggeration, taps into people’s shared experiences or beliefs. We have yet to see a group of teenagers watch this movie without a hilarious response and comments like “That is so true!” (pp. 205-206)

The authors described a range of contemporary educational experiences that continue to fall into this approach to learning, from high school and college instruction to workplace trainings to conference sessions. Palmer (1998)

characterized this hierarchical model of instructional delivery as an objectivist myth, in which “truth flows from the top down, from experts who are qualified to know truth...to amateurs who are qualified only to receive truth” (p. 101). Palmer identified two problems with this myth:

It falsely portrays how we know, and it has profoundly deformed the way we educate. I know a thousand classrooms where the relationships of teacher, students, and subject look exactly like this image. But I know of no field—from astronomy to literature to political science to theology—where the continuing quest to know truth even vaguely resembles this mythical objectivism. (p. 101)

According to Cambron-McCabe and Dutton (2000), many educators today have been moving away from the “transmission approach” toward a “generative” one. This model, based on theories and methods such as constructivism, collaborative learning, and cooperative learning, advocates coaching students through exploration, inquiry, and discovery. Cambron-McCabe and Dutton succinctly summarized this teaching methodology:

Learners create knowledge by building on their own experiences and by interacting with the subject matter and with other people, including the teacher or facilitator. New knowledge is created layer by layer. Contrary to popular criticism, generative pedagogy *does not* minimize content. It is built on a belief that learning is about both content and process, and that students more actively engaged in the process retain more and have a deeper understanding of the content. (p. 206)

According to these authors, effective pedagogy must extend beyond the transmission and generation of knowledge in the classroom. It must extend into the larger context of the world. Thus, the “transformative” pedagogical model, based on the generative pedagogical model of active learning and student engagement, emerged from the educational theory and practice of critical pedagogy. “Through this pedagogy, an individual can tap into the deep learning cycle, which provides a means to think critically about the world so that learning is a process of both self- and social transformation” (p. 207). Foundational to this pedagogical model is social action, in which learners become empowered to use their knowledge to transform society.

CHRISTIAN PEDAGOGY

Christian pedagogy, as illustrated throughout the documents on Catholic education (CCE, 1977, 1988; National Conference of Catholic Bishops [NCCB], 1972, 1976), addresses all three pedagogical models, as exemplified in Table 1. Groome (1996) crystallized the essence of Christian peda-

gogy as engaging “the very ‘being’ of...students, to inform, form and transform their identity and agency—who they are and how they live—with the meaning and ethic of Christian faith” (p. 118). However, the instructional methods that teachers employ, which ultimately stem from their beliefs about teaching and learning, that is, whether they are predominantly teacher-centered or learner-focused, will determine the extent that their students become informed, formed, and transformed.

Table 1

Sample Excerpts From Catholic Documents Addressing Three Pedagogical Models

Pedagogical model	Catholic document excerpt
Transmission	“The task of a teacher goes well beyond transmission of knowledge, although that is not excluded” (CCE, 1982, ¶16).
Generative	“The [Catholic] school considers human knowledge as a truth to be discovered” (CCE, 1977, ¶41).
Transformative	“Since the Gospel spirit is one of peace, brotherhood, love, patience and respect for others, a school rooted in these principles ought to explore ways to deepen its students’ concern for and skill in peacemaking and the achievement of justice” (NCCB, 1972, ¶109).

MILLENNIAL GENERATION STUDENTS

As written in *The Catholic School* (CCE, 1977), teachers must continually “adapt their work to the needs of the contemporary world” (§17). Thus, the realistic assessment of today’s students and their learning needs are central to an effective pedagogy. Prensky (2001a) designated today’s students as “digital natives.” He wrote, “Our students today are all ‘native speakers’ of the digital language of computers, video games and the Internet” (p. 1). They become engaged through interactivity and, according to Prensky, have short attention spans “for the old ways of learning” (p. 4), but not for topics that interest them.

Digital Natives crave *interactivity*—an immediate response to their each and every action. Traditional schooling provides very little of this compared to the rest of their world (one study showed that students in class get to ask a question

every 10 hours). So it generally isn't that Digital Natives *can't* pay attention, it's that they *choose not to*. (2001b, p. 4)

Nicoletti and Merriman (2007) identified today's learners as "millennial students," part of Generation Y born between 1982 and 2003. Based on the work of Jonas-Dwyer and Pospisil (2004) and Sweeney (2006), the following are conditions under which millennial students prefer to learn:

- In a collaborative learning environment. They exhibit a preference for teamwork incorporating cooperative learning and constructivist principles.
- In a challenging environment that has as its purpose a "life plan" that is goal orientated and directed toward their future plans.
- In a flexible, personalized, and customized program.
- In an environment that makes learning interesting.
- In a structured environment.
- In an environment that uses technology to enable them to be more productive and connected.
- In an environment that is goal and achievement orientated.

Thus, the wise teacher will implement a pedagogy that will engage today's millennial students with their distinct learning needs.

Having explored three major pedagogical models, along with the uniqueness of today's learners, components of Christian spirituality will be investigated as foundational to a spiritual pedagogy for Catholic schools.

SPIRITUALITY IN CATHOLIC SCHOOLING

Ó Murchú (1998) provided a helpful definition for spirituality: "an openness to the creative Spirit of wisdom and love who inhabits the whole of creation and dwells in my inner being, informing my every instinct and my desire for meaning" (p. 28). Ó Murchú explained that formation in a specific religious system is not a precondition for a spiritual experience, but that

My formal faith tradition will enable me to name my experience, to couch it in words and concepts which will assist in deepening the experience and will enable me to engage with others in shared spiritual discourse, the basis for any authentic participation in the community of the church. The temptation here is that the ability to name can also become the occasion to label, to box things into categories that belong to the linear and literalist mind-set, to establish immutable dogmas. (p. 28)

Based on Ó Murchú's definition, a teacher wishing to craft a spiritually-based pedagogy creates a learning space with students that invites the creative spirit of God into their lives and, likewise, encourages students' expressions of the spirit through their learning. In addition, the teacher delivers instruction through intentionally thought-out methodologies that encourage students to discover ways that the spirit permeates the "whole of creation," as well as engages learners in self-exploration and awareness of the spirit dwelling within them. This teacher does not reserve this pedagogy for religion class, but implements it throughout the curriculum.

According to Jacobs (2005), there are five graces from God (see Figure 1) that empower educators to become spiritual leaders. In the case of teachers, these graces are foundational to employing a spiritually-based pedagogy with their students and, hence, to becoming spiritual leaders who integrate the spiritual dimension throughout their curricula. They represent areas of continuing growth and practice for the teacher.

The first grace is "understanding the nature of the soul and of spiritual experience" (Jacobs, 2005, p. 69). Jacobs challenged educators to stretch beyond the study of child development, which involves interpreting the child's physical and cognitive development in relationship to learning, to incorporate the developmental nature of the soul.

Understanding the nature of the soul and of spiritual experience adds greater depth and texture to the mind-body interaction by reminding Catholic educational leaders of the crucial third element constitutive of every human life, namely, the unique and unrepeatable soul God has breathed into each human being. (p. 69)

Particularly in the Catholic school, but throughout the world of education, attention to students' souls and the indwelling of the divine in their souls is essential to the educative process, particularly when wishing to teach to the whole child. Moreover, teachers are called to an "integral formation" of students (CCE, 1982, §28), which discourages a disconnected, fragmented approach to student development, and, rather, promotes the holistic, integrated development of body, mind, and soul.

Five Graces of Teachers Who Are Spiritual Leaders

1. Understanding the nature of the soul and spiritual experience
2. Adopting a contemplative stance
3. Exhibiting a magnanimous spirit
4. Possessing interpersonal sensitivity
5. Acting with courage

Figure 1. Jacob's (2005) five graces foundational to spiritual leadership, adapted and expanded from Edwards (2001)

The second grace, “adopting a contemplative stance,” provides teachers with “the clarity of insight needed to discern better what God is calling them to do as they nurture...the souls entrusted to their spiritual leadership” (Jacobs, 2005, p. 69). This grace involves an ongoing contemplation of one’s “personal vocation,” which, in the words of Alphonso (2001), designates “the essence of our being...that expresses itself in everything we do” (p. x). Once discerned, one’s personal vocation “becomes the *criterion of discernment* for every decision in life, even for the daily details of decision making... ‘God’s will’ in the deepest theological meaning of this much-repeated and much-misused phrase” (p. 43). In the little book, *Discovering Your Personal Vocation*, Alphonso offered a brief, yet profound reflection on identifying one’s “personal vocation” as a means to discovering the very essence of one’s being that is unique and unrepeatable. Alphonso wrote,

The heart of ongoing formation...[lies in] a person’s inmost resources of being, that person’s unrepeatable meaning in life that is the source and secret of all his or her ongoing formation: that individual’s personal vocation constitutes the life antennae, which are constantly picking up from the atmosphere or the whole range of human experience that which is meaningful for true growth and ongoing formation. (p. 50)

In other words, the personal vocation is precisely a person’s unrepeatable unique way of opening out onto community—opening out onto social reality, social responsibilities, social commitment. (p. 53)

Durka (2002), reiterating the unique dimension of each teacher’s vocation, wrote, “Even though there are common threads in the calling of each teacher, each teacher dwells in the role in a unique way. We each give our vocation a distinctive stamp” (p. 6). The teacher’s vocation, which penetrates one’s deepest self and interfaces with one’s God-given uniqueness, requires the consistent contemplative/reflective practice of entering one’s interior space to further discern one’s vocation. Subsequent student formation relies upon this process of the ongoing “interior synthesis” of the teacher (CCE, 1982, §29).

“Exhibiting a magnanimous spirit,” Jacobs’ (2005) third grace, involves a genuine openness and sensitivity to “the presence and movement of the Holy Spirit within oneself, the school community, and its members” (p. 68). This “magnanimous spirit” requires continually becoming awake to the movement of the Holy Spirit in one’s own life, as well as in the lives of learners. Challenging, but rewarding, dimensions of this grace may involve discernment of the presence and movement of the Spirit in conflicts that arise in school settings, in students who are psychologically troubled or who struggle with learning difficulties, and in other similar demanding situations.

Exhibiting a magnanimous spirit connotes a teacher who is kind, generous, and forgiving.

“Possessing interpersonal sensitivity,” the fourth grace, attunes the teacher to the learning needs of his or her students. It requires a willingness to put aside one’s professional agenda for the sake of the learner and the potential teachable moment, ultimately guiding students to discern “who God is calling each of them to become as well as what God is calling them to do both as individuals and as a community” (Jacobs, 2005, p. 70). Palmer (1998), addressing the concept of interpersonal sensitivity specifically as a capacity for connectedness, wrote, “Bad teachers distance themselves from the subject they are teaching—and in the process, from their students. Good teachers join self and subject and students in the fabric of life” (p. 11). Palmer continued to expand upon the teacher’s interpersonal skills in the context of his or her pedagogy:

Good teachers possess a capacity for connectedness. They are able to weave a complex web of connections among themselves, their subjects, and their students so that students can learn to weave a world for themselves. The methods used by these weavers vary widely: lectures, Socratic dialogues, laboratory experiments, collaborative problem solving, creative chaos. The connections made by good teachers are held not in their methods but in their hearts—meaning heart in its ancient sense, as the place where intellect and emotion and spirit and will converge in the human self. (p. 11)

Jacobs (2005) defined the fifth grace, “acting with courage,” as “the strength of character enabling Catholic educational leaders to proclaim God’s word to the school community and its members” (p. 68). Expansion of this concept embraces the courage required of the teacher on a daily basis to implement a spiritually-based pedagogy.

The courage to teach is the courage to keep one’s heart open in those very moments when the heart is asked to hold more than it is able so that teacher and students and subject can be woven into the fabric of community that learning, and living, require. (Palmer, 1998, p. 11)

The courageous teacher is open to discovering creative ways for students to recognize the Spirit of God in their lives and to express the Spirit through their learning. Such a teacher is not driven by fear, reverting, for example, “to the safety of teaching by rote rather than relationship” (Palmer, 2004, p. 110), but rather, is motivated by integrity. According to Palmer (1998),

Integrity requires that I discern what is integral to my selfhood, what fits and

what does not—and that I choose life-giving ways of relating to the forces that converge within me: Do I welcome them or fear them, embrace them or reject them, move with them or against them? By choosing integrity, I become more whole, but wholeness does not mean perfection. It means becoming more real by acknowledging the whole of who I am. (p. 13)

The five graces offered by Jacobs (2005) provide areas to be cultivated by the teacher who wishes to implement a spiritually-based pedagogy. These five areas form the preconditions for a pedagogy that successfully invites the creative Spirit of God into the classroom and supports the learner's expression of the Spirit throughout the curriculum.

FROM AN INDUSTRIAL-AGE TO A NEW SCIENCE APPROACH TO LEARNING

Educational literature is replete with descriptions of the paradigmatic shift that is occurring in perspectives on learning, mainly from an assembly-line approach to educating children to one that is anchored in the New Sciences (Brown & Moffett, 1999; Caine & Caine, 1994; Marzano, Pickering, & Pollock, 2001; Senge et al., 2000; Wheatley, 1999; Zemelman, Daniels, & Hyde, 2005). This section will support the contention that a spiritually-based pedagogy must be firmly based in a New Science, systems approach to student learning.

INDUSTRIAL-AGE APPROACH TO LEARNING

In the mid-19th century, educators in the United States used the factory as their model for the design of public schools. Senge et al. (2000) detailed this assembly-line influence on schooling:

Like any assembly line, the [school] system was organized in discrete stages. Called grades, they segregated children by age. Everyone was supposed to move from stage to stage together. Each stage had local supervisors—the teachers responsible for it. Classes of twenty to forty students met for specified periods in a scheduled day to drill for tests. The whole school was designed to run at a uniform speed, complete with bells and rigid daily time schedules. Each teacher knew what had to be covered in order to keep the line moving, even though he or she had little influence on its preset speed, which was determined by school boards and standardized curricula. (pp. 30-31)

Unfortunately, today, too many schools continue to resemble assembly lines and endorse the “transmission” pedagogical approach discussed earlier. Based on this model, Senge et al. derived a summary of underlying assump-

tions about learning and schooling that are displayed in Figure 2. Clearly, a spiritually-based pedagogy, which inherently strives for the formation and transformation of students, cannot interface within an industrial-age model of education.

THE NEW SCIENCE REVOLUTION

Over the past 100 years, a “systems revolution” has been provoking a shift in scientific and social worldviews. Originating in the fields of physics and biology, this revolution has progressed throughout the cognitive and social sciences. Senge et al. (2000) stated that this shift

is just at its outset, especially the appreciation of living systems as opposed to static mechanistic systems. Because it takes a very long time for a fundamental shift in scientific worldview to work its way into society, even though the beginnings of the systems view dates to 1900 or so, our institutions are still organized based on machine thinking that dates to the seventeenth century. Probably another fifty to one hundred years will pass before the systems revolution truly becomes integral to our way of living as has the machine thinking that preceded it. (p. 52)

Systems thinking, in contrast to “machine thinking,” is based on the holism of living systems, rather than the exclusive focus on mechanistic parts of systems, with an emphasis placed on the relationships within those systems (Wheatley, 1999). Applied to teaching, a New Science perspective advocates:

- Learner-centered learning rather than teacher-centered learning;
- Encouraging variety, not homogeneity—embracing multiple intelligences and diverse learning styles; and
- Understanding a world of interdependency and change rather than memorizing facts and striving for right answers. (Senge et al., 2000, p. 55)

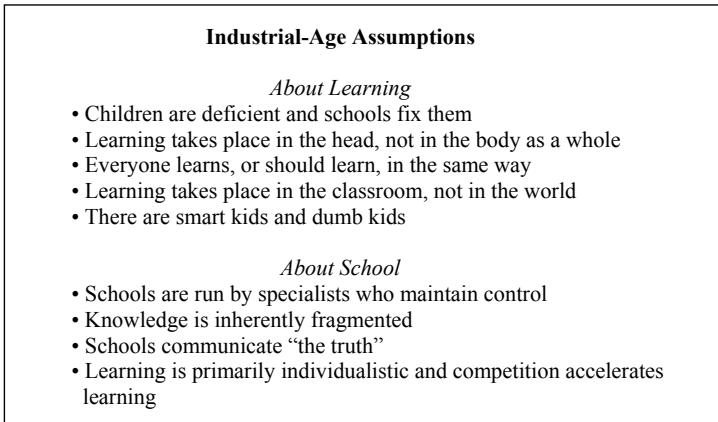


Figure 2. Industrial-age assumptions about learning and schooling (Senge et al., 2000, pp. 35-42, 43-49)

Palmer (1998), in opposition to the objectivist myth of education, proposed a spiritually-based model, which he named a “community of truth.”

The community of truth represents knowing quite differently...In the community of truth, as in real life, truth does not reside primarily in propositions, and education is more than delivering propositions about objects to passive auditors. In the community of truth, knowing and teaching and learning look less like General Motors and more like a town meeting, less like a bureaucracy and more like bedlam. (p. 101)

Central to learning in “a community of truth” is the “subject,” which represents the “great things of life,” with learners interacting to form a web of relationships among themselves and with the subject matter. This interactive, relational model is in sharp contrast to the traditional, hierarchical model of instructional delivery in which “truth flows from the top down, from experts who are qualified to know truth...to amateurs who are qualified only to receive truth” (p. 101). Palmer elaborated the distinction between these two models:

This distinction is crucial to knowing, teaching, and learning: *a subject is available for relationship; an object is not.* When we know the other as a subject, we do not merely hold it at arm’s length. We know it in and through relationship. (pp. 102-103)

[In such a learning community] students and the act of learning are more important than teachers and the act of teaching. The student is regarded as a reservoir of knowledge to be tapped, students are encouraged to teach each

other, the standards of accountability emerge from the group itself, and the teacher's role varies from facilitator to co-learner. (p. 116)

This style of teaching and learning is respectful of and hospitable to the souls of its learners, whose value is not derived from objectified means, such as test scores and assignments, but rather, from their very beings who are in relationship with one another. Learning is participative, interactive, and cooperative. Thus, this type of classroom may evolve into a sacred space; it is fertile ground for entry of the Spirit of God and welcoming to students' expressions of the Spirit in their learning.

INSTRUCTIONAL BEST PRACTICES THAT SUPPORT SPIRITUAL DEVELOPMENT

A teacher's instructional practices will either advance or impede the creation of a classroom environment that can evolve into a sacred learning space. According to Zemelman, Daniels, and Hyde (2005), practices that discourage such an environment include excesses in the following areas: "teacher directed instruction" such as lecturing; "student passivity" in the form of "sitting, listening, receiving, and absorbing information"; "one-way transmission of information from teacher to student"; "prizing and rewarding of silence in the classroom"; "classroom time devoted to fill-in-the-blank worksheets, dittos, workbooks, and other 'seatwork'"; "time spent reading textbooks and basal readers"; "attempts by teachers to thinly 'cover' large amounts of material in every subject"; "rote memorization of facts and details"; "competition and grades"; "tracking or leveling students into 'ability groups'"; "pull-out special programs"; and "use of and reliance on standardized tests" (p. 8).

In contrast, instructional practices that can advance a community of learners to incorporate the creative spirit of God into their learning consist of more: "experiential, inductive, hands-on learning"; "active learning, with all the attendant noise and movement of students doing, talking and collaborating"; "diverse roles for teachers, including coaching, demonstrating, and modeling"; "emphasis on higher-order thinking"; "deep study of a smaller number of topics, so that students internalize the field's way of inquiry"; "reading of real texts," such as entire books, primary sources and nonfiction resources; transference of responsibility to students for their work, such as self-assessment, goal setting, and record keeping; "choice for students," such as choosing their own research projects, writing topics, and team partners; "enacting and modeling the principles of democracy"; "attention to affective needs and varying cognitive styles of individual students"; "cooperative, collaborative activity"; "heterogeneous classrooms where individual needs are

met through individualized activities, not segregation of bodies”; “delivery of special help to students in regular classrooms”; “varied and cooperative roles for teachers, parents, and administrators”; and “reliance on descriptive evaluations of student growth, including observational/anecdotal records, conference notes and performance assessment rubrics” (Zemelman et al., 2005, pp. 8-9). From these various instructional practices that can advance a community of learners, 13 interconnected principles emerged for Zemelman and colleagues that encapsulate this model of education. These principles are identified and explained in Figure 3.

Zemelman et al.’s (2005) best practice principles may be examined through the lens of the definition of a spiritually-based pedagogy, couched in Ó Murchú’s (1998) definition of spirituality cited earlier, in which a learning space is created with students that invites the creative spirit of God into their lives and, likewise, encourages students’ expressions of the spirit through their learning. As mentioned earlier, for this type of learning environment to become actualized, the teacher must implement distinct teaching and learning methodologies that encourage students to become aware of ways that the spirit permeates the “whole of creation,” as well as to engage learners in self-exploration of the spirit dwelling within them. Zemelman et al. proposed explicit teaching and learning methods, embedded in their 13 principles (see Figure 3), which promote the holistic development of students and nurture their spiritual development. For example, learning that is “Experiential,” “Authentic,” and “Holistic,” is personalized and relevant to the learner. Experiential learning engages students and activates their curiosity and desire to learn. In essence, such learning methodologies activate the spirit of God that lies within each learner. Passive “drill and kill” methods deactivate the spirit within the student and create disconnects between learners and their inner lives. As stated by Zemelman et al., “Active, hands-on, concrete experience is the most powerful and natural form of learning” (p. 10). When a student is engaged in an exciting learning experience, he or she comes in contact with that dimension of self that Alphonso (2001) characterized as “the ‘name’ by which God calls me—that is, my truest or deepest self” (p. 8), the home base of his or her personal vocation.

Thirteen Best Practice Principles of Effective Teaching and Learning

STUDENT-CENTERED

The best starting point for schooling is young people's real interests; all across the curriculum, investigating students' own questions should always take precedence over studying arbitrarily and distantly selected "content."

Experiential

Active, hands-on, concrete experience is the most powerful and natural form of learning. Students should be immersed in the most direct possible experience of the content of every subject.

Holistic

Children learn best when they encounter whole ideas, events, and materials in purposeful contexts, not by studying subparts isolated from actual use.

Authentic

Real, rich, complex ideas and materials are at the heart of the curriculum. Lessons or textbooks that water down, control, or oversimplify content ultimately disempower students.

Challenging

Students learn best when faced with genuine challenges, choices, and responsibility in their own learning.

COGNITIVE

The most powerful learning comes when children develop true understanding of concepts through higher-order thinking associated with various fields of inquiry and through self-monitoring of their thinking.

Developmental

Children grow through a series of definable but not rigid stages, and schooling should fit its activities to the developmental level of students.

Constructivist

Children do not just receive content; in a very real sense, they recreate and reinvent every cognitive system they encounter, including language, literacy, and mathematics.

Expressive

To fully engage ideas, construct meaning, and remember information, students must regularly employ the whole range of communicative media—speech, writing, drawing, poetry, dance, drama, music, movement, and visual arts.

Reflective

Balancing the immersion in experience must be opportunities for learners to reflect, debrief, and abstract from their experiences what they have felt and thought and learned.

SOCIAL

Learning is always socially constructed and often interactive; teachers need to create classroom interactions that "scaffold" learning.

Collaborative

Cooperative learning activities tap the social power of learning better than competitive and individualistic approaches.

Democratic

The classroom is a model community; students learn what they live as citizens of the school.

Figure 3. Best practice principles derived by Zemelman et al. (2005, pp. 10-11)

Likewise, when students become involved in "meaning-making" in which they construct their own knowledge ("Constructivist") and understand concepts through higher-order, including metacognitive, thinking ("Cognitive"), they learn not only that life has meaning and consequent

value, but also, that meaning emerges from within themselves. When they are encouraged to reflect upon (“Reflective”) and express (“Expressive”) their learning in multiple, creative formats, they tap into the spirit of God within them for this information. When they are guided to express their learning collaboratively (“Collaborative”) and creatively, students learn experientially that collaboration with others can be a powerful means to contributing to the social and spiritual capital of the world.

CONCLUSION

When students actively engage in their learning through New Science teaching and learning methodologies, namely through “generative” and “transformative” pedagogical models, they experience opportunities to activate the spirit of God dwelling within them. This activation propels their spiritual development, which lies at the heart of Catholic education. In contrast, Industrial-Age methods emanate from a “transmission” pedagogical model, which relegates students to passive modes of learning and may cause to deactivate the spirit of God dwelling within them and, hence, their spiritual development. Today’s “millennial generation students” crave interactivity in their learning, which may indicate this generation’s need for spiritual activation.

A teacher wishing to implement a spiritually-based pedagogy must be equipped to do so with the God-given graces intrinsic to effective spiritual leadership. However, these graces must be cultivated and refined within the teacher through routine spiritual practice. According to Palmer (1998),

“Who is the self that teaches?”...is the most fundamental question we can ask about teaching and those who teach—for the sake of learning and those who learn. By addressing it openly and honestly, alone and together, we can serve our students more faithfully, enhance our own well-being, make common cause with colleagues, and help education bring more light and life to the world. (p. 7)

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