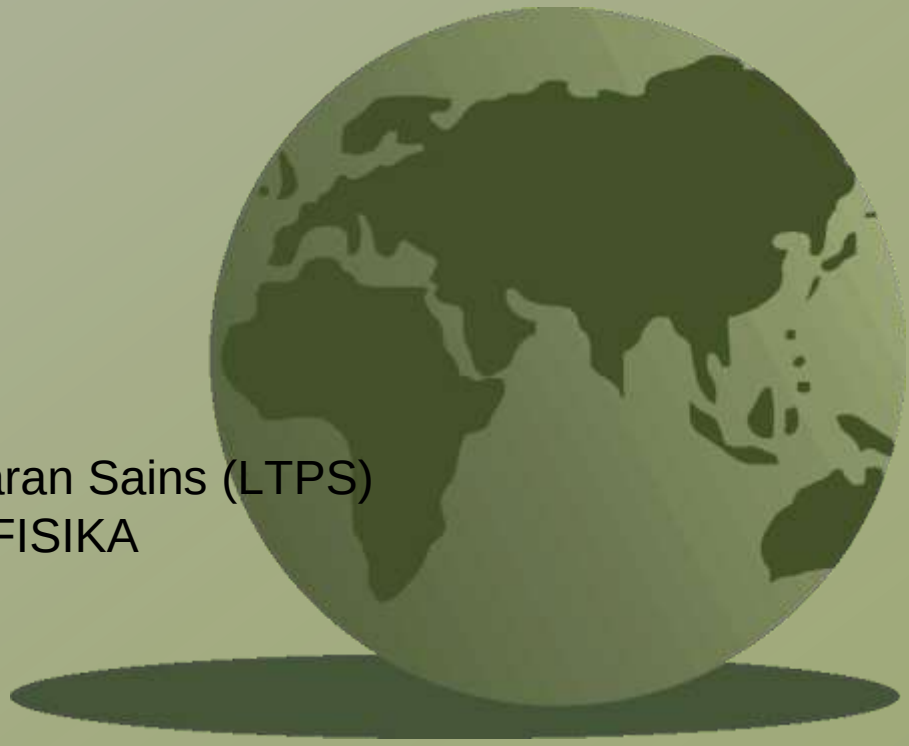
Multimedia dan *Instructional Software*



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Software Tools and Classroom Application

Instructional Software	Sample Instructional Benefits	Sample Classroom Uses
Drill and Practice	• Gives immediate feedback on correctness of answers • Increases motivation for students to practice • Saves teacher time on grading student work	• Supplement or replace assigned worksheets and homework • Prepare student for test
Tutorial	• Supplements or replaces teacher presentations • Presents instruction in more visual, self-paced, motivating way than teacher-delivered presentation	• Provides self-paced review of a topic after students have received classroom instruction • Supplies alternative way of learning when usual strategies do not work • Supplies instruction on topics for which teachers are not available

Software Tools and Classroom Application

Instructional Software	Sample Instructional Benefits	Sample Classroom Uses
Simulation	• Compresses time or slows down processes so they can be studied • Makes demonstration interactive • Allows safe experimentation • Allow simulated experiences that are not possible in real life • Saves money on consumable resources • Allow experiments to be repeated with variation • Makes situation controllable so they can be studied	• Replace or supplements lab experiment, role playing, and field trips • Introduce new topics • Fosters exploration and process learning • Provides format that encourages cooperative group work

Software Tools and Classroom Application

Instructional Software	Sample Instructional Benefits	Sample Classroom Uses
Instructional Games	• Provides highly motivating format for practice	• Replace worksheet and exercise • Provide format that encourages cooperative group work • Rewards good work
Problem Solving	• Directed benefits: Focuses attention on required problem solving skills • Constructivist: Allows self-discovery of principles	• Allow concentrated practice of key problem solving skills • Foster exploration and process of learning • Provides format that encourages cooperative group work

Software Tools and Classroom Application

Sample Software Tools	Sample Classroom Uses
Word Processing	Teacher letters, flyer, and other document; student writing processes; dynamics group products; language exercises
Spreadsheets	Demonstration of math principles; student tables and charts; support for math problem solving; data storage and analysis; projecting grades
Databases	Teacher resource inventories; personalized letters; ready access to student information; support for teaching research and study skill, organization skills, posing and testing hypotheses, searching for information during research
Desktop publishing software	Working individually or small groups, student create their own letterhead, brochures, flayers/poster, newsletters, books.

Software Tools and Classroom Application

Sample Software Tools	Sample Classroom Uses
Image Processing Tools	Teacher and student use to illustrate document, web pages
Charting/graphing tools	Student use to create charts and graphs to illustrate and study data summaries
Clip art, video, and sound collections	Teachers and students insert these into documents and media they create
Video Development Tools	Teacher can create video demonstrations; students create videos to illustrate principles they have learned

Software Tools and Classroom Application

Sample Software Tools	Sample Classroom Uses
Concept Mapping Software	Student use these to help organize their ideas visually in preparation for writing and to show how sub-concept that make up topic area are related to each other
Electronic encyclopedias, atlases, and dictionaries (Microsoft Student, etc.)	Help students research topics they have been assigned
CAD system	Help students create visual models of houses and other structures as they study design concepts
MBLs/CBLs	Help Student collect and analyze data from experiments

Criteria to Evaluate Multimedia Material

List of Criteria

Motivation	Content	Method
· user-friendliness · attractiveness · clear description of purpose and work assignment	· relevance · scope · correctness	· flexibility · matching to target group · realization · documentation

User-friendliness:
Is it easy to start using the MM?
Are the design comprehensible and the image quality satisfactory?
Is the function of control elements evident?
Are the software requirements clear and of adequate proportion?

Attractiveness:
Is the layout appealing?
Is there a motivating introduction?
Are there interactive components?
Is the topic interesting (reference to everyday life, applications, explaining a phenomenon)?
Is the MM up-to-date / innovative?

Clear description of purpose and work assignment:
Is the intention of the MM evident?
Does the user know what is expected from him?
Is there a problem to solve or a context to understand?

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List of Criteria

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Relevance:
Is the topic important?
Does it make sense to use the MM (e.g. problems in understanding, dynamic process)?

Scope:
Is there a profoundness of content?
Is there a broadness of content (special case, general overview)?

Correctness:
Is the content of the MM correct?
Are simplifications indicated?

Criteria to Evaluate Multimedia Material

List of Criteria

Motivation	Content	Method
· user-friendliness · attractiveness · clear description of purpose and work assignment	· relevance · scope · correctness	· flexibility · matching to target group · realization · documentation

Flexibility:
Is the MM appropriate for a broad target group (incl. self-learning)?
Is it possible to use the MM in different teaching and learning situations?
Does the MM allow for the same topic to be approached in different ways?

Matching to target group:
Is a reasonable didactical reduction implemented?
Are technical terms explained?
Are the objectives appropriate?

Realization:
Is the general approach suitable to present the subject and realize aims of the given MM?
Is the type of MM chosen reasonable (video, simulation, animation)?

Documentation:
Is the operation obvious or explained?
Is the material self-evident or explained by additional text?
Is there a reference to material for further studies?
Are there any suggestions for implementation into the teaching process?

Evaluasi Media Visual yang Diproyeksikan

- Format:
  ---- Transparansi
  ---- Slide (gambar bingkai)
  ---- Filmstrip

No.	Kriteria	Rating		
		Tinggi	Sedang	Rendah
1	Dapat membangkitkan minat dan perhatian siswa	……	……	……
2	Kualitas teknis	……	……	……
3	Memberikan latihan dan partisipasi yang relevan	……	……	……
4	Relevan dengan tujuan kurikuler & sasaran bel.	……	……	……
5	Terfokus dengan jelas pada tujuannya	……	……	……
6	Terbukti efektif (dengan uji coba di lapangan)	……	……	……
7	Memberikan petunjuk untuk tindak lanjut, diskusi	……	……	……
8	Bebas dari bias ras, suku, gender, agama, dll.	……	……	……

Titik Kekuatan :

Titik Kelemahan :

Evaluasi Media Pembelajaran dengan Komputer

- Mata Kuliah :
- Sasaran Pemakai:
- Sistem Komputer:

No.	Kriteria	Rating		
		Tinggi	Sedang	Rendah
1	Terfokus dengan jelas pada tujuan	……	……	……
2	Interaktif terus menerus	……	……	……
3	Bercabang sesuai dengan tingkat kemampuan siswa	……	……	……
4	Relevan dengan tujuan kurikulum dan sasaran bel.	……	……	……
5	Format penyajian memotivasi	……	……	……
6	Terbukti efektif (dengan uji coba lapangan)	……	……	……
7	Sajian gambar/grafik sesuai	……	……	……
8	Petunjuknya sederhana dan lengkap	……	……	……
9	Memberikan penguatan positif	……	……	……
10	Dapat digunakan lagi (dapat disajikan ulang dengan variasi)	……	……	……

Titik Kekuatan :

Titik Kelemahan :

Daftar Pustaka

- Arsyad, A., 2007, Media Pembelajaran, PT Raja Grafindo Persada, Jakarta.

- Padmo, D., dkk. (editor), 2004, Teknologi Pembelajaran: Peningkatan Kualitas Belajar melalui Teknologi Pembelajaran, Pustekkom, Jakarta.

- Roblyer, M. D., 2004, Integrating Educational Technology into Teaching (2004 Update), Pearson Education, Jew Jersey.

- Sadiman, A., dkk., 2007, Media Pendidikan : Pengertian, Pengembangan, dan Pemanfaatannya, PT Raja Grafindo Persada, Jakarta.