浅谈农村初级中学如何促进信息技术与物理教学的融合

摘要：[根据党的十九大会议精神，提出加快教育现代化，将当前的教育领域实现与信息技术相结合作为教育改革、发展的新动力，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C1.html%22%20%5Ct%20%22right)[使教育改革向进入信息化2.0时代迈进。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C2.html%22%20%5Ct%20%22right)[这就要求充分激发信息技术对教育的影响，但是现阶段的发展距离新时期对教育发展要求还有较大差距。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C3.html%22%20%5Ct%20%22right)[教师们的信息技术应用水平尤其是农村地区中学的教师水平不高，教学创新能力不足，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C4.html%22%20%5Ct%20%22right)[应用信息技术融合教学水平很低。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C5.html%22%20%5Ct%20%22right)[需要加快教育观念的更新、改进教学模式、加深信息技术与物理学科的融合。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C6.html%22%20%5Ct%20%22right)[笔者结合自身一线教学实践和信息技术应用的经验，谈谈如何促进农村中学信息技术与物理教学的融合。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C7.html%22%20%5Ct%20%22right)

关键词： 信息技术，物理教学，融合

[为了践行教育信息化2.0行动，提高学校信息化应用和师生信息技术水平，努力建成“互联网+”大平台环境，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C10.html%22%20%5Ct%20%22right)要[推动信息技术与物理学科教学的融合，笔者认为一定要立足农村中学实际情况，提出具体改进策略。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C11.html%22%20%5Ct%20%22right)[农村中学的教师对信息技术应用于教学的认识普遍不高，教学设施较为陈旧，教学手段比较单调，对于信息技术与学科教学的融合缺乏认识](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C12.html%22%20%5Ct%20%22right)， 实施的积极性不高，也缺乏应用的方式和方法。 笔者作为一线物理教师，结合自己平时的教学经验和信息技术应用实践，谈谈自己的对于促进信息技术和物理教学的融合方面的一些看法。

[一、农村中学要实现“融合”，先要有效的提高乡镇初中教师的教育信息技术水平。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C15.html%22%20%5Ct%20%22right)

[（一）、大多数农村初中教师的教育信息化意识单薄，很多教师认识不够。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C16.html%22%20%5Ct%20%22right)[认为信息技术就是简单的会使用电脑，电子白板。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C17.html%22%20%5Ct%20%22right) 甚至有部分老教师排斥教育信息化，认为这是可有可无的。[怎样有效提高乡镇中学的教师对信息技术应用于教学的认识呢？](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C19.html%22%20%5Ct%20%22right)[1、通过继续教育或教育局举办的讲座的学习改变教师的教育思想，提高教师的认识。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C20.html%22%20%5Ct%20%22right)2、通过教育技术能力培训，继续教育等方式(二级、一级教师)来进一步加强提高教师教育信息化意识。

[（二）、农村初级中学教师实际应用信息技术的水平很低。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C24.html%22%20%5Ct%20%22right)

 [农村中学的大部分教师自身已有信息技术水平低。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C25.html%22%20%5Ct%20%22right)但是[新参加工作的教师信息技术水平相对好一些。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C26.html%22%20%5Ct%20%22right)[Windows的基本操作，office，flash软件基本会操作，但是缺少教育教学经验。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C27.html%22%20%5Ct%20%22right)[中年教师的教学经验丰富，但是只会一些简单的电脑操作，Word，excel，PowerPoint操作熟练度不够。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C28.html%22%20%5Ct%20%22right) 老年教师信息技术水平更差。 甚至多媒体的一些简单的操作都不会。

[如何提高教师的信息技术水平，是农村初级中学实现“融合”面临的一个难题。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C31.html%22%20%5Ct%20%22right) 解决对策：[1、通过新老教师之间进行结对子来提高大部分教师的信息技术水平。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C33.html%22%20%5Ct%20%22right) 2、通过校本培训来提高教师的信息技术水平。 3、通过教育局或学校举行各种信息技术应用于教学的竞赛活动来促进教师信息技术水平的发展。 例如： 多媒体软件大赛，电子白板课堂教学竞赛，设计制作电子教案，制作微课评比活动等活动。

[（三）、农村初级中学教师没有把信息技术应用于教育教学而是其他方面。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C38.html%22%20%5Ct%20%22right)

很多家里有电脑的教师使用计算机仅仅只是上网看看电影电视剧、上网聊天或玩游戏、上网购物。他们[没有把信息技术运用到促进提高教学水平上。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C40.html%22%20%5Ct%20%22right)这些[可以通过提高教师信息技术水平，促进教师在教学中使用的习惯来解决。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C41.html%22%20%5Ct%20%22right)

[二、想要促进信息技术与物理课堂教学的融合，要对旧的教学模式进行改革，建立新型教学方式。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C42.html%22%20%5Ct%20%22right)

农村初级中学很多教师的教学模式普遍还是传统的教学模式，即一块黑板一支粉笔本，或者对着电子白板放ppt。[课堂教学以教师为中心，依然采取“满堂灌”等方式。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C44.html%22%20%5Ct%20%22right) 少部分教师使用电子白板交互式多媒体设备上课，但是课堂教学模式还是传统教学模式，没有发生实质性改变，只不过把黑板加粉笔换成了多媒体。我们要：[1、教师必须改变角色观念，打破束缚，勇于尝试新的教学模式。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C48.html%22%20%5Ct%20%22right) 2、成立以学校为主导，教务处牵头，各学科教研组组长为主要成员的课堂教学模式改革实验小组，[在学校开展运用信息技术进行课堂教学的课题，带领各科教师积极参与研究，解决“整合”中遇到的信息技术和教学方面的难题。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C50.html%22%20%5Ct%20%22right)

[三、应用信息技术，提高实际的教学效果](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C53.html%22%20%5Ct%20%22right)

（一）、利用多媒体上新授课

教师在教学讲授新课时[用视频、动画导入新课力求生动，可以激发学习的兴趣，引出本节的教学内容和知识点。然后，让学生通过看课本，完成学案。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C56.html%22%20%5Ct%20%22right)[看投影，在学生充分学习的基础上，与小组同学交流，知道本节课学习内容](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C57.html%22%20%5Ct%20%22right)[或者实验后，再让学生代表上台演讲所学知识或者上台自己动手做演示实验。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C58.html%22%20%5Ct%20%22right)其他同学[提问相关问题，主讲学生解答、老师点评。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C59.html%22%20%5Ct%20%22right)这样学生理解新学的知识，更有利。

[（二）、利用多媒体课件、白板及时进行当堂练习](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C60.html%22%20%5Ct%20%22right)

每节课讲授结束后，[复习巩固所学知识很重要，最好让学生总结本节课的知识点](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C61.html%22%20%5Ct%20%22right)。教师[分析完成习题的情况，做出点评。课后进行反思，便于以后对教学内容进行必要的调整和补充。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C63.html%22%20%5Ct%20%22right)

[（三）、教师利用多媒体激励学生上台讲解](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C64.html%22%20%5Ct%20%22right)，促进学生掌握知识点

让[学生上讲台讲解，在学生相互交流的基础上，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C65.html%22%20%5Ct%20%22right)教师[提供机会一定要让学生代表上台讲解教学知识点或者习题解题过程。因为这样才能让他们，学得深、学得透、理解深。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C66.html%22%20%5Ct%20%22right)[这种学习模式，能更好的调动积极性，能使他们牢牢记住所学知识。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C67.html%22%20%5Ct%20%22right)[教师还可以提出一些开放性的问题，让同学之间讨论交流，挖掘寻找他们的思想闪光点，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C68.html%22%20%5Ct%20%22right)[让他们发表自己的意见，即使错了，学生之间可以讨论交流形成统一的观点](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C69.html%22%20%5Ct%20%22right)[。教师把课堂学习还给学生，处于辅助指导的地位。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C70.html%22%20%5Ct%20%22right)

[（四）、利用powerpoint，flash，希沃白板等课件、引导学生观察宏观和微观的物理现象](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C71.html%22%20%5Ct%20%22right)

例如：[在讲授九年级的分子扩散时，分子是微观物体看不见、摸不着，抽象地讲解，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C72.html%22%20%5Ct%20%22right)[学生不好理解，这时我们可以借助原子和分子模型，制作物体内部分子无规则运动的 flash动画，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C73.html%22%20%5Ct%20%22right)[通过投影来演示，发现微观分子运动的规律，使得学生便于理解。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C74.html%22%20%5Ct%20%22right)

[再例如，在讲到能量的转化时，指导学生学习人造卫星动能和重力势能相互转换时，可以制作卫星环绕地球运动时flash动画，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C75.html%22%20%5Ct%20%22right)[引导学生观察当人造卫星在远地点和近地点之间运动过程，观察人造卫星的速度和高度变化。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C76.html%22%20%5Ct%20%22right)[直观形象的揭示了动能和重力势能相互转换的规律，学生易于接受。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C77.html%22%20%5Ct%20%22right)

[（五）、利用flash动画的动态图像，突破物理教学的重点、难点](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C78.html%22%20%5Ct%20%22right)

[利用flash动画可使抽象的概念体象化。因为他们能进行动态演示，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C79.html%22%20%5Ct%20%22right)控制视频的播放速度，[能增强学生直观印象。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C81.html%22%20%5Ct%20%22right)[利用他们的特点还可突破平时教学中很难解决的问题，为我们突破教学重点、难点提高课堂效果最好手段。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C82.html%22%20%5Ct%20%22right)[例如模拟电路动态变化时，制作 flash动画，模拟滑动变阻器的滑片向左右移动后电阻变化影响电流变化，影响部分电路两端电压的情况，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C83.html%22%20%5Ct%20%22right) 学生能直观发现电阻变化导致电流变化影响部分电路两端电压的过程，总结破解电路动态变化时的解题规律。[当然最好能让学生亲自做实验，体会理解电路中各物理量的变化情况。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C85.html%22%20%5Ct%20%22right)

[（六）、利用信息技术，丰富实验课教学的方法，培养学生的创新思维](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C86.html%22%20%5Ct%20%22right)

[实验课最能锻炼学生创新思维。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C87.html%22%20%5Ct%20%22right)[但是由于科学探究的过程有其固定的模式：学习依据实验原理，设计实验，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C88.html%22%20%5Ct%20%22right)[忽略其他因素对实验干扰，实验方法很重要，还必须有合理实验操作的步骤。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C89.html%22%20%5Ct%20%22right) 设计实验是初中物理最难的地方。[所以，老师要在备课时提前做好演示实验的动画或者视频，把实验中需要注意的问题，实验的原理，](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C91.html%22%20%5Ct%20%22right)[方法的设计，实验操作的步骤，实验中要验证得出结论，交代清楚。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C92.html%22%20%5Ct%20%22right)[还可以建立这样的物理实验资源库，学生离校后也可以在网上做模拟实验。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C94.html%22%20%5Ct%20%22right)这样[能够锻炼学生实验能力，培养设计实验能力。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C95.html%22%20%5Ct%20%22right)[但是教师要注意的是，在应用信息技术进行实验教学时，不能完全代替学生自己动手做实验。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C96.html%22%20%5Ct%20%22right)

[根据以上的分析论述，在促进信息技术与物理实际教学的融合时一定要结合农村初中教学实际情况，提出切实策略才能有效使信息技术与物理学科教学之间深入融合。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C98.html%22%20%5Ct%20%22right)[通过“融合”激发学生学习兴趣，增长学生实验能力。](file:///C%3A%5C%5CUsers%5C%5CAdministrator%5C%5CDesktop%5C%5CPaperPass-%EF%BF%BD%EC%BD%A2%EF%BF%BD%EF%BF%BD-%EF%BF%BD%EF%BF%BD%E2%B1%A8%EF%BF%BD%EF%BF%BD%5C%5Chtmls%5C%5Csentence_detail%5C%5C99.html%22%20%5Ct%20%22right) 同时，促进教师构建一些创新教育模式，完善课堂教学，提高课堂教学效果，帮助教师在课堂上更合理的掌握、分配教学时间。

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